Bharath
INSTITUTE OF HIGHER EDUCATION AND RESEARCH
(Declared as Deemed - to - be - University under section 3 of UGC Act 1956)

NAAC

BHARATH INSTITUTE OF SCIENCE AND TECHNOLOGY

Requisition Letter

From   Date: 21.03.2019
Dr. K.P.Kaliyamurthie,
Professor & Head,
Department of CSE,
Bharath Institute of Higher Education and Research,
Chennai

To
The Dean Engineering,
Bharath Institute of Higher Education and Research,
Chennai

Respected sir

Subject: Request of Permission to conduct a value added course on **"Practical Machine Learning with Tensorflow"** -Reg

With reference to above subject, I would like to bring to your kind notice that, our department is prepared to organize value added course on **"Practical Machine Learning with Tensorflow"** in our campus premises on **28/03/2019**.

30 students would be participating in this course. We request you kindly to give permission to organize this event.
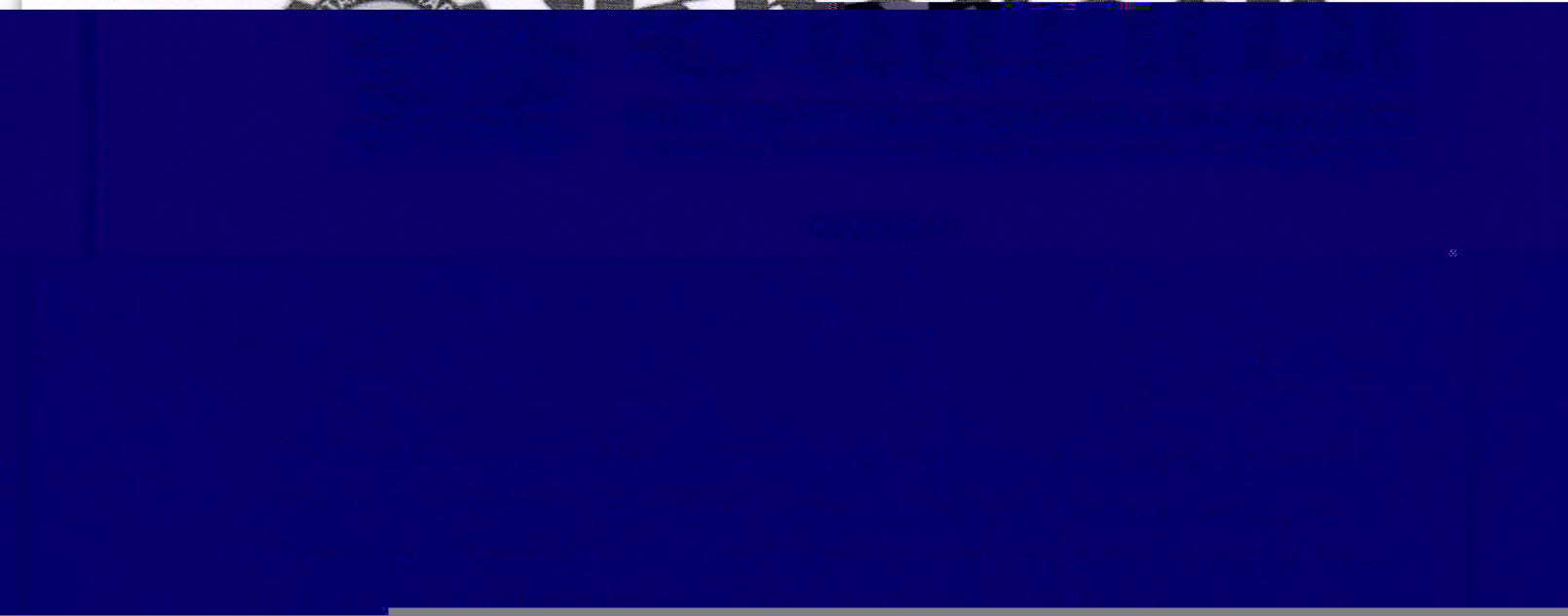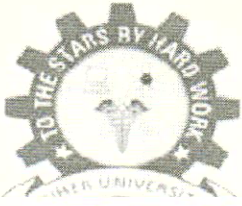
Venue: **CSE Smart Room**

Timing : **9 am to 4.30 pm**

Submitted to Principal for approval to organize the event.

Head Co-Department
Department of CSE
Bharath Institute of Higher Education & Research
(and as Deemed to be University u/s 3 of UGC Act, 1956)
Chennai-600 073, INDIA

CERTIFICATE COURSE ON PRACTICAL MACHINE LEARNING WITH TENSORFLOW

Date of Introduction of the Course: 28.3.2019

COURSE SYLLABUS

1. Getting started with Tensorflow

...ps in machine learning process- loss

...vised and Reinforcement Learning
...nd evaluation – machine learning

...a pipeline for tensor flow – text

...ext classification- underfitting and

...hub – Image

...sting with RNN

- Write "Hello World" program in
...orFlow constant and play with it -

1. **Getting Started with Tensorflow**

   Overview of tensor flow – machine learning refresher- step
   function in machine learning – gradient decent

2. **Overview of Machine Learning**

   Explore Machine Learning intuition - Supervised, Unsuper...
   intuition - Gradient decent variations – model selection a...
   visualization – deep learning refresher–introduction to tenso...

3. **Statistic for Machine learning**

   Mathematical foundations of deep learning – building dat...
   processing with tensorflow

4. **Machine Learning Model Building**

   Classify images – regression – classify structured data – t...
   overfitting – save and restore models

5. **Deep Neural Network**

   CNN – transfer learning with pretrained CNN – transfer learning with T...
   classification and visualization

6. **Deep Neural models**
   Introduction to word embeddings – Recurrent neural network – time series foreca...
   – text generation with RNN - Estimator API – Logistic Regression – Boosted Tre...

7. **Installing TensorFlow Environment**

   Install Anaconda Distribution - Restore the environment file ...
   Jupyter Notebook - TensorFlow Basic Syntax - Create Tens...
   Create Interactive Session - Matrix Multiplication

8. **TensorFlow Essentials**